







Product No's 16150 16165 16174

# **Operating Instructions**







# ស្ត SPALDINGS<sup>®</sup>

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# Section -

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# **INTRODUCTION**

#### 1.0 Identification

The identification plate (Fig. 1), attached to the machine shows the following information:

- Manufacturer's Name
- CE mark
- · Year of production
- Serial number
- Recommended tractor horsepower
- · Overall weight
- · PTO speed and direction of rotation

NOTE: It is important to refer to the data on the identification plate in order to check the compatibility of the topper with the tractor to be used and when ordering spare parts.

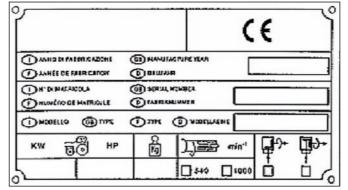


Fig.1 Identification plate

# 1.1 Before operation

At the factory each machine is carefully inspected to guarantee proper functioning. **Each machine has a pre-delivery inspection**.

# **SAFETY GUIDELINES**

## 2.0 Safety symbols

The operator must fully understand the warning symbols on the machine.

The symbols are used to highlight important information:



#### DANGER

To draw the operator's attention to situations which could endanger his or other peoples safety.



#### CALITION

To draw the operator's attention to situations which could affect the machine performance but not his or other peoples safety.



#### **IMPORTANT**

To draw the operator's attention to situations which do not affect the machine performance and his or other peoples safety.

It is important to comply with the instructions given by the safety stickers, which must always be on the machine. If new stickers are required, contact Spaldings.

The manufacturer is not responsible for any consequence due to the inobservance of these instructions.

# 2.1 Understanding the safety symbols

Before operating the machine, it is important that each operator understands the following explanations.

#### Safety symbol

#### Symbol meaning





#### **BEFORE OPERATION**

**1 & 2**. Before operating, adjusting or servicing the machine, it is important that each operator carefully reads the operating instructions.

Servicing etc. should be carried out with the engine stopped, hand brake applied and the starter key removed.



#### **DURING OPERATION**

3. Danger from flying objects. Any persons near the machine must keep at a safe distance.





**4 & 5**. Danger of hand injury. Keep away from rotating parts and the PTO shaft.

Do not attempt to remove safety guards or make adjustments whilst the machine is working or the tractor engine running.





- **6**. Danger of feet injury. Any persons near the machine when working, must keep at a safe distance.
- 7. Danger of hand injury. Any person near the machine when working, must keep at a safe distance.
  Do not attempt to remove safety guards or make adjustments whilst the machine is working or the tractor engine running.



#### SERVICING

8. Servicing, lubrication etc. should be carried out with the engine stopped, the hand brake applied and the starter key removed.

Once the machine is raised do not work underneath it without secure support.



#### LIFTING

When lifting the machine always use appropriate lifting gear attached to the lifting eyes on the machine frame.

# **SAFETY GUIDELINES**

# 2.2 General safety instructions

- During operation keep a safe distance from rotating parts and the PTO shaft.
- Do not remove safety guards during operation or with the tractor engine running.
- Servicing, lubrication etc. should be carried out with the engine stopped, the hand brake applied and the starter key removed.
- Once the machine is raised do not work underneath it unless supported securely.
- Whilst at work ensure any persons or animals nearby are a safe distance from the Topper to avoid injury caused by flying objects.
- When lifting the machine always use appropriate lifting gear attached to the lifting eyes on the machine frame.

# 2.3 Operator requirements

- The operator must understand how the machine works, be responsible when operating the machine and aware of potential danger.
- The operator must have read this booklet and fully understand the warning symbols on the machine.
- The operator must be adequately trained and qualified to operate the tractor and the implements attached to it.

# **INSTRUCTIONS FOR USE**

# 3.0 Headstock positioning

#### SIDE POSITIONING

#### 1.65m Model

It is possible to fit the headstock in a central position or shifted to one side by 15cm. To change the position of the headstock:

- 1. Remove the bolts connecting the headstock to the chassis and reposition it using the next series of holes on the chassis.
- 2. Refit the 'H' shaped plates so that they blank the holes on the chassis to avoid material escaping through the holes.

#### Model AT

When this model is not fitted with the optional hydraulic side shift, it is possible to manually move the headstock to the desired position:

- Slacken the bolts that lock the sliding tube to the galvanised tube.
- 2. Remove the two bolts fixing the top stay to the guide on top of the chassis and reposition the headstock.
- 3. Re-fit and secure the bolts.

#### Models GT, LT

When these models are not fitted with the optional hydraulic side shift, it is possible to manually move the headstock to the desired position:

- 1. Slacken the bolts that lock the sliding brackets to the galvanised tube and reposition the headstock.
- 2. Secure the bolts.

## 3.1 Connection to a tractor

#### LINKAGE

Some Topper models have adjustable lower link brackets. Before attaching the machine to the tractor, adjust the brackets to match the distance between the tractor arms.

- 1. On a flat surface, reverse the tractor to the machine, apply the hand brake, attach the lower links and then the top link.
- 2. Adjust tension chains or links in order to allow only a minimum sideways movement, adjust the top link so that when in operation the machine is parallel to the ground.
- 3. Fit all locking pins.

#### **FITTING THE PTO SHAFT**

IMPORTANT: Please ensure that the PTO power shaft is cut to the correct length to suit the tractor which the Topper is attached – for further information see the instruction booklet attached to the power shaft.

BOTH SECTIONS OF THE POWER SHAFT <u>MUST</u> BE CUT TO THE EXACT SAME LENGTH.

4. Check that the guards chains are properly secured.

# **INSTRUCTIONS FOR USE**

# 3.2 Working height

The working depth is controlled by re-positioning the skids or the rear wheels (where applicable).

#### **SKID ADJUSTMENT**

- 1. Slacken the front bolt A (Fig. 2)
- 2. Remove the rear bolt B
- 3. Adjust the skid to the required position
- 4. Re-fit the rear bolt. Re-tighten front bolt.

Repeat the operation on the other side of the machine.

# DO NOT SET THE MACHINE TOO LOW. BLADES TOUCHING THE GROUND ARE DANGEROUS AND CAN DAMAGE THE ROTOR.

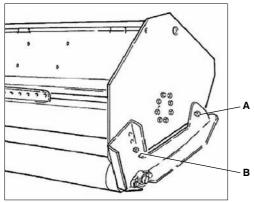


Fig. 2 Skid adjustment

### **REAR WHEELS ADJUSTMENT**

(OPTIONAL EXTRA)

With the wheels in the working position.

- 1. Slacken the bolt A (Fig.3) to adjust the distance between the wheels.
- 2. Remove and reposition bolt B to achieve the required depth.

Repeat the operation on the other side.

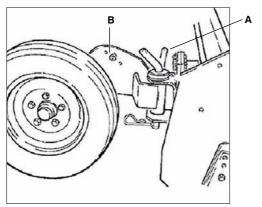


Fig. 3 Rear wheel adjustment

# 3.3 Hydraulics

When the machine is fitted with hydraulic side shift, connect the hoses to the tractor double-acting spool valve.

The hydraulic side shift should never be operated with the machine standing on the ground

#### 3.4 In the field

Lower the Topper to the ground, engage the PTO and increase the speed. Start to move forward at an adequate speed.

# 3.5 Road transport

If the machine is fitted with rear wheels, these must be folded by relocating the pin.

# **MAINTENANCE**

BEFORE CARRYING OUT ANY SERVICING TURN OFF THE TRACTOR ENGINE, APPLY THE HAND BRAKE AND DISENGAGE THE PTO. WHEN WORKING BENEATH THE MACHINE ENSURE IT IS ADEQUATELY SUPPORTED.

#### 4.0 Lubrication

#### **Every 10 working hours:**

 Grease the rotor's supports and the rear roller supports (when fitted) with lithium grease through the grease nipples located on the side of the machine.

#### **Every 50 working hours:**

- 1. On those models fitted with side shift, grease all sliding parts using lithium grease.
- Check the gear box oil level. If necessary, top up using gear oil EP90, the oil level plug is fitted halfway up the gearbox casing and placed on the side or front of the gearbox depending on the model.

#### Every 250 working hours / or once a year:

1. Change the gear box oil.

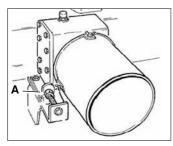
# 4.1 Belts adjustment

After the first 2/3 hours of work and every 40 thereafter check the belts tension. Through the slot on the belt guard, check that the belts do not give more than 5mm.

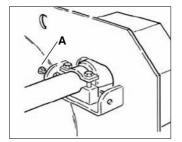
#### **TENSIONING BELTS**

#### Models AT, GT, HT & LT, MT, KT, ST

- 1. Slacken the bolts under the gearbox (models AT, GT, HT) or next to the gearbox (models LT, MT, KT, ST) and those holding the side shaft plate located on the side of the machine.
- 2. To obtain the right tension adjust the screw A (Figs. 4, 5) in order to move the whole transmission parallel.



Figs. 4 & 5 Belts adjustment



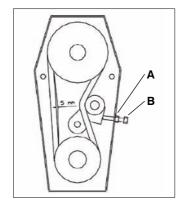


Fig. 6 Belts adjustment

#### **TENSIONING BELTS**

#### **Model XT**

The correct belts tension is obtained by adjusting the tensioner placed inside the transmission case.

- Slacken the counter nut A (Fig. 6) and turn the bolt B until the right tension is obtained. This can be checked through the slot placed on the opposite side of the transmission case. The belts must not have a free movement of more than 5mm.
- 2. Secure the counter nut A.

## 4.2 Blades replacement

- 1. Everyday check the bolts for tightness and the blades for wear and breakages (Fig. 7).
- 2. Replace all broken, bent or worn blades. To keep the rotor balanced, cut or grind the new blade so that it weighs as the other blades.
- 3. Depending on the model, blades can be reached from the back once the tailgate has been lifted or from underneath by lifting the machine.

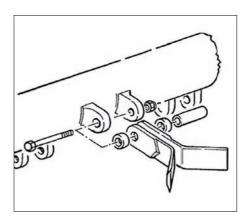


Fig. 7 Blade replacement

## 4.3 Replacement of front stone guards

If the front stone guards are damaged, they must be immediately replaced.

- Remove the bolt securing the pivot rod and slide it out until the damaged guard can be replaced.
- 2. Push the rod back in and fix it.

# 4.4 Storage and post-season

Before storing the machine for short or long term periods:

- 1. Clean the machine.
- 2. Inspect it for damaged or broken parts and replace them as necessary.
- 3. Spray with a rust inhibitor all parts that during use have lost their initial paint (Agri-wax, 5 ltrs, prod. 04442).
- 4. Grease the PTO shaft following the manufacturer recommendations.
- 5. Store the machine in a dry place.

# **SPECIFICATION & REPLACEMENT PARTS**

5.0 Specification									
Working width	Dimensions	Weight	Rotor diameter	PTO speed	Power requirement	Flails prod no.	No. of Flails		
NTED FLAIL	. TOPPERS								
2.8m	295 x 130 x 95cm	940kg	200 x 10mm	540 rpm	80 – 110 hp	08493	26		
AR MOUNTI	ED FLAIL TOPPER								
1.95m	208 x 124 x 162cm	550kg	150 x 10mm	540 rpm	60 – 80 hp	16166	28		
REAR MOUN	NTED FLAIL TOPPER	category	1 linkage						
1.65m	180 x 80 x 70cm	230kg	108 x 8mm	540 rpm	25 – 35 hp	16166	26		
	Working width  INTED FLAIL 2.8m  EAR MOUNTI 1.95m  REAR MOUNTI	Working width Dimensions  INTED FLAIL TOPPERS  2.8m 295 x 130 x 95cm  EAR MOUNTED FLAIL TOPPER  1.95m 208 x 124 x 162cm  REAR MOUNTED FLAIL TOPPER	Working width Dimensions Weight  INTED FLAIL TOPPERS  2.8m 295 x 130 x 95cm 940kg  EAR MOUNTED FLAIL TOPPER  1.95m 208 x 124 x 162cm 550kg  REAR MOUNTED FLAIL TOPPER category	Working width Dimensions Weight Rotor diameter  NTED FLAIL TOPPERS  2.8m 295 x 130 x 95cm 940kg 200 x 10mm  EAR MOUNTED FLAIL TOPPER  1.95m 208 x 124 x 162cm 550kg 150 x 10mm  REAR MOUNTED FLAIL TOPPER category 1 linkage	Working width Dimensions Weight Rotor diameter speed  NTED FLAIL TOPPERS  2.8m 295 x 130 x 95cm 940kg 200 x 10mm 540 rpm  EAR MOUNTED FLAIL TOPPER  1.95m 208 x 124 x 162cm 550kg 150 x 10mm 540 rpm  REAR MOUNTED FLAIL TOPPER category 1 linkage	Working width         Dimensions         Weight         Rotor diameter         PTO speed         Power requirement           INTED FLAIL TOPPERS           2.8m         295 x 130 x 95cm         940kg         200 x 10mm         540 rpm         80 – 110 hp           EAR MOUNTED FLAIL TOPPER           1.95m         208 x 124 x 162cm         550kg         150 x 10mm         540 rpm         60 – 80 hp           REAR MOUNTED FLAIL TOPPER         category 1 linkage	Working width         Dimensions         Weight         Rotor diameter         PTO speed         Power requirement         Flails prod no.           INTED FLAIL TOPPERS           2.8m         295 x 130 x 95cm         940kg         200 x 10mm         540 rpm         80 – 110 hp         08493           EAR MOUNTED FLAIL TOPPER           1.95m         208 x 124 x 162cm         550kg         150 x 10mm         540 rpm         60 – 80 hp         16166           REAR MOUNTED FLAIL TOPPER         category 1 linkage		

# 5.1 Replacement parts

#### TO FIT 2.8 & 2.2m REAR MOUNTED TOPPERS (Fig. 8)

10 FIT 2.8 & 2.2m REAR MOUNTED TOPPERS (FIG.8)						
16175	Cat.2 Lower link pin.	16141	Complete gearbox.			
16176	Cat.2 Top link pin.	16143	Gearbox input shaft.			
16131	Transmission V-belt (4 required).	16140	Complete PTO shaft.			
16142	Drive shaft oil seal.	16189	Side shift tube (post July 2007).			
16148	Drive belt guard.	16145	Side shift tube, 2-hole fixing (pre-2007).			
16182	Rear roller (2.8m).	16146	Side shift hydraulic ram.			
16133	Roller bearing.	16147	Headstock swan neck.			
16212	Main rotor bearing.	16132	Side shift bearing.			
16117	Skid R.H.	16162	Enamel paint, Spaldings Topper red, 5 litres.			
16118	Skid L.H.	16163	Aerosol enamel paint, Spaldings Topper red, 400 ml.			
16119	Bolt-on skid wear plate (fits 16117 & 16118).					

16122 Bolt and lock nut, c/sunk hex key fitting, for 16119. Pk of 10.16121 Front metal stoneguard.

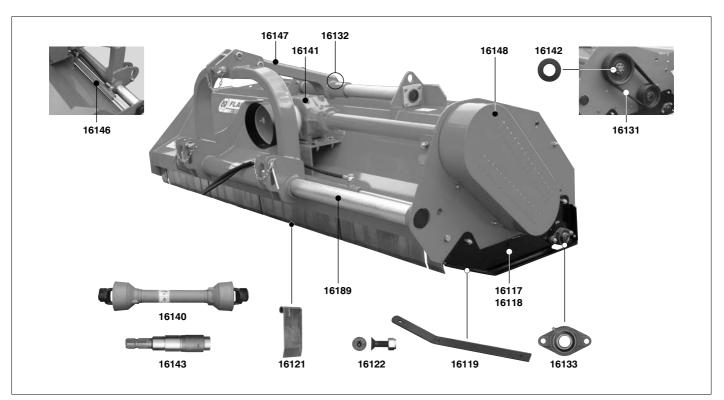


Fig. 8

# **SPECIFICATION & REPLACEMENT PARTS**

# 5.2 Replacement parts

#### TO FIT 1.95M OFFSET TOPPER (Fig. 9)

16164 PTO Power shaft and guard.
16169 Drive belt (4 required).
16171 Bearing for roller.
16121 Front metal stoneguard.

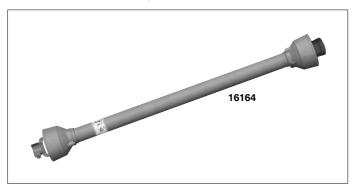


Fig. 9

# 5.3 Replacement parts

#### **TO FIT 1.65M COMPACT TOPPER**

16183 Rotor c/w flails (1.65m).16177 Drive belt (2 required).16178 Complete PTO shaft.

**16179** Front metal stoneguard.

16194 Rear roller.16180 Roller bearing.

# 5.4 Replacement flails

#### TO FIT 2.8 & 2.2m REAR MOUNTED TOPPERS (Fig. 10)

08493 Heavy duty forged flail. 16.5mm Φ.16144 Spacer (2 per flail), pack of 10.

**16134** M16 x 110mm 10.9G bolt & lock nut. Pack of 10.

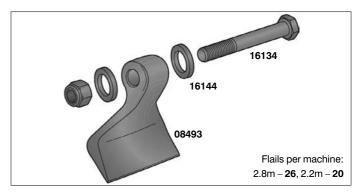


Fig. 10

### TO FIT 2.8 & 2.2m REAR MOUNTED TOPPERS (Fig. 11)

16136 Heavy duty grass flail.16135 Bush for 16136.16137 Spacer for 16135.

16134 M16 x 110mm 10.9G bolt & lock nut. Pack of 10.

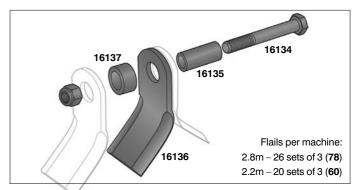


Fig. 11

#### TO FIT 1.95m OFFSET & 1.65m COMPACT TOPPERS (Fig.12)

16166 Heavy duty forged flail. 14.5mm Φ

**16167** M14 x 90mm 10.9G bolt & lock nut. Pack of 10.

16168 Spacer (2 per flail). Pack of 10.

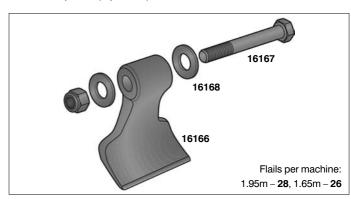


Fig. 12



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